

Rost

Feb. 27, 1964

## Linear Phasolver Measuring Engine, Contract

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[redacted] seem to have the program pretty well under control. They have started the electronic work again and with continued progress, it will not be a pacing item. The digital circuits are almost all built and tested and the rack wired for them. The analogue circuits are being worked on. The drive amplifier and preamp which was used in phase 1 at 6 1/2 KC is being tested at 10 Kc for use in this phase. They are making open loop gain and phase plots and will check it for stable operations over a temperature range of 50° F to 100° F.

They have allotted 4 weeks in April to check out the electronics. They expect to use the old plates from ph.1 for the checkout so that the electronics phase will be in good order when they go into system test the end of April.

[redacted] is working on the master and it is due March 19. The master will then go to [redacted] for making the final plates., which will take about 4 weeks. The glass plates have been completed by [redacted] and are now over at [redacted] for measurement.

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If [redacted] meet their dates, TC expects to be able to demonstrate 1 micron measuring capability before the end of June. This is a little later than their contract date, but they have not formally requested a contract extension. They are currently on the schedule that was reported in the 5th progress report, 12 Dec. 63

We discussed some of the approaches to the design of a prototype measuring machine using the linear phasolver as the measuring engine. It is important of course to retain the unique advantages of the linear phasolver:

- a. No ambiguity in the reading
- b. No long train of pulses to count
- c. No limitation on traverse rate imposed by a lead screw rate or by a counting rate.

They will put some of their ideas on paper for [redacted] to consider. They will also send [redacted] a copy of their proposal for a White Sands reader. They are in negotiation on that contract now.

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